

An Educator's TECHNOLOGY Toolkit

[Padlet](#) is a virtual wall that allows people to express their thoughts on a common topic easily. It works like an online whiteboard where people can put any content (e.g. images, videos, documents, text) anywhere, together with anyone, from any device.

[Designing Your Classroom](#) app to explore how differentiated instruction might change your use of classroom space. Be sure to use the tool's Capture option to save your image. (*Note: This applet works best using Firefox and Google Chrome.*)

[Intel's Assessing Projects Tool](#) is a free application that you can use to design your own assessments for different purposes. You can also access a library of existing assessments which you can then modify and personalize as needed. The site also offers opportunities to learn more about assessment strategies and research. Take some time to [create an account](#) and explore how this tool can help you to plan for assessment.

[A Brave New World Wide Web](#), by David Truss. This video explores the impact that Web 2.0 tools can have on learning and teaching. As you watch, think about how this teacher uses technology to facilitate connections with peers outside of his immediate school, and how that could impact the types of instructional ideas that he brings back to his classroom.

The following blogs are maintained by people that are dedicated to integrating Web 2.0 tools in education and teacher professional development programs. Explore the content in some of these blogs to learn more about how the web is changing and how these changes can impact teaching and learning in the classroom.

[CoolCatTeacher Blog](#), Vicki Davis

[The Fischbowl](#), Karl Fisch

[Moving at the Speed of Creativity](#), Wes Fryer

[2 Cents Worth](#), David Warlick

[Teach42.com](#), Steve Dembo

[Weblogg-ed](#), Will Richardson

[Equal Access: Universal Design of Instruction](#), a video from the DO-IT Center. This video details a number of methods teachers use to make their curriculum accessible to all students. Make note of strategies that will be useful in your own teaching.

[The New Literacies](#) [\[transcript\]](#). In this video, Chris Dede of the Harvard University Graduate School of Education describes the 21st Century student and the skills he or she will need for success.

[RSS in Plain English](#), offers a brief overview of RSS feeds and how to set up an account in Google Reader.

[Goomoodleikiog](#). This video explains how wikis and other Web 2.0 tools can make learning more engaging for students and how they can help teachers become more effective.

[Social Networking in Plain English](#). This video highlights the advantages of social bookmarking using the tool Delicious.

[Examples of Educational Wikis](#) wiki for ideas about using wikis to engage students or help them collaborate on group projects. You can also search for wikis on [wiki.com](#) to find wikis that are relevant to your curriculum. If you find one that pertains to a unit of study that your students are doing, consider having your students contribute to the wiki by sharing what they learn. To get started, explore these examples of how wikis are currently being used for educational purposes.

[Miss. Baker's Biology Class Wiki](#)

[Flat Classroom Project 2008](#)

[Periodic Table Wiki](#)

Social Bookmarking Tools

Tool	Support	Description
Delicious	Social Bookmarking Even When You're Not Social: Why I Use Delicious by Professor Hacker Help on Delicious Social Bookmarking with Delicious	Delicious was one of the first social bookmarking sites, and remains one of the most popular. Users store bookmarks online, can sign into their account from any computer, and can find sites of interest by examining tags or other users.
Diigo	Video: Diigo V3: Highlight & Share the Web! Social Bookmarking 2.0 Diigo wiki Diigo User Guide	In addition to being a social bookmarking tool, Diigo offers users the ability to "annotate" the Web. This means that Diigo users can post comments—visible only to other Diigo users—directly on websites.

Web-Based Resources

Type	Tool	Description
Online Curriculum	Classzone	Online textbook and interactive resources.
Online Curriculum	Curriki	Free, open-source instructional materials for K-12.
Online Curriculum	OER (Open Educational Resources) Commons	Media and lesson plans in all subject areas.
Online Curriculum	MIT OpenCourseWare	Highlights for High School: Advanced Content and Interactives for Science and Math.
Interactive Applications	Explore Learning	5-minute interactive gizmos for math and science.
Interactive Applications	HippoCampus	Multimedia lessons and course materials in all subject areas.
Interactive Applications	Thinkfinity	Interactive media and lesson plans in all subject areas.
Interactive Applications	National Library of Virtual Manipulatives	Interactive math activities by grade level.
Multimedia	Discovery Education Streaming, Discovery Education	Streaming video and classroom resources from Discovery Education.
Multimedia	PBS Teacher Source, PBS	Videos, classroom resources, and interactives from PBS Teachers.
Multimedia	Video Gallery, The History Channel	List of videos available from the History Channel.
Multimedia	Image Library, Springfield Township High School Virtual Library	Comprehensive list of copyright friendly images and sounds for use in student multimedia projects.
Podcasting	LearnOutLoud	Collection of audio and video resources for classroom use.

TOOL/RESOURCE TYPE	TOOL/RESOURCE	DESCRIPTION
Multimedia Libraries	Khan Academy	A collection of over 3000 videos that K-12 math, biology, chemistry, physics and some of the social science. Each video is about 10 minutes long and many include interactive components to check understanding.
	Cosmo Learning	A collection of free learning materials in multiple formats organized by traditional curriculum standards.
	PBS Learning Media	A free, subscription-based service that contains quality multimedia on all subjects for all grade levels. Once subscribed you can tag and annotate your favorite resources for future reference.
	Discovery Education	A paid, subscription-based service that contains video, interactive lessons, real-time assessment and other virtual experiences for students and teacher professional development. (Many schools have subscriptions, check to see if your school does).
	LearnOutLoud	Over 5000 free educational audio and video titles including famous speeches and lectures around the world.

	Gooru Learning	Gooru allows you to search for rich collections of multimedia resources, digital textbooks, videos, games, and quizzes created by educators in the Gooru community. You can save and customize your resources with an account and share your content with others in the community.
Applets and Interactives	Brain Pop	
	National Library of Virtual Manipulatives	
	Shodor Interactivate	
	PhET Interactive Simulations	
	ExploreLearning	
Digital/Interactive Texts	Project Gutenberg	A collection of free electronic books, many with accompanying audio.
	LibriVox	A collection of free audio books, featuring human narration, from the public domain.
	Free Classic Audio Books	Audio versions of many classic novels with both human narration and advanced TTS.

CONTENT-CREATION TOOLS: Content-creation tools are great for creating custom materials for teaching and for use by students to show what they have learned. One great benefit to creating your own teaching materials, is that you absolute control over the content that is covered. It can, however, be time-consuming. For students, allowing for alternate methods to display knowledge and skills allows for greater creativity, choice, and a sense of ownership. These selected tools may help you focus on the types of tools that would best fit with your learning goals and student needs, and show the types of products that can be created. For more options organized by category visit: [Cool Tools for Schools](#)

PRODUCT	TOOL	DESCRIPTION
Poster	GlogsterEDU	Create interactive posters that can include text, audio, video, and more.
Presentation	Prezi	Organize, present, and share your ideas in a fun visual way.
Screencast	Jing	Create images and videos of what you see on your computer screen, then share them instantly.
Video	Animoto	Create presentations incorporating images, video clips, music and text.
Comic	ComicLife	Create comics, picture albums, how-tos, and more.
Books	UDL Bookbuilder	Create, share, publish, and read digital books.
Animation	Pivot	Create stick figure animations.
Animation	iCreatetoEducate	Create stop motion animation videos.
Concept Maps	Exploratree	Create concept maps to brainstorm ideas, organize thinking, or explain concepts.
Interactive	Scratch	Create interactive stories, animations, games, music, and art.
Music	Jam Studio	Create your own music using

		different instruments and styles.
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SKILL SUPPORT AND ASSISTIVE TECHNOLOGIES: Some learners have very specific needs that may hold them back in a learning experience. Many technologies exist that target particular disabilities or skill deficits that can help level the playing field for all learners.

Explore the [TechMatrix](#), a database of assistive technologies and resources, or choose some tools to look at from the table below. It may be helpful to think about a particular student you have had in your classroom who might have benefited from a technology support like this to frame your exploration.

SKILLS/SUPPORT TYPE	TOOL/RESOURCE	DESCRIPTION
Analysis	Thinkport Annotator	The Annotator can help you look closely at any piece of text created by authors in your classroom or around the world. You can use virtual markers to highlight important passages, questions, thoughts, or other ideas, and add comments that explain what the lines mean to you.
Vocabulary	Dictionary.com Toolbar	Look up definitions and synonyms instantly.
Research	CAST Strategy Tutor	Helps students read, research, collect and understand information better and more efficiently.
Research	Zotero	Helps students collect, organize, cite, and share research sources.
Reading/Comprehension	UDLEditions	A collection of digital

		texts with embedded supports including "Stop and Think" prompts, TTS, dictionary and reference supports, and annotation tools.
Hearing and Visual Disabilities	Described and Captioned Media Program	This organization specializes in providing accessible media to hearing and visually impaired individuals.
Translation	Text To Speech	Text to speech converter with language translation support.

Tools for Finding Digital Text

Resource	Description
Google Books	Digital copies of both fiction and non-fiction titles. Books in copyright will have limited previews; full-text is available on out-of-copyright and public domain titles. <i>Note: Because some books are in an "image" format rather than "text" format, they may not be compatible with Text-To-Speech (TTS) programs.</i>
Forgotten Books	Full text versions of out-of-copyright titles (works with Google Books).
Project Gutenberg	A collection of free electronic books, many with accompanying audio.
LibriVox	A collection of free audio books, featuring human narration, from the public domain.
Free Classic Audio Books	Audio versions of many classic novels with both human narration and advanced TTS.
Perseus Digital Library	A collection of digital materials relating to the history, literature, and culture of the Greco-Roman world.
Bookshare	A collection of accessible books and periodicals for readers

with print disabilities.

Note: This resource is free to qualified students.

Tools for Finding Advanced Digital Texts (with embedded supports)

Resource	Description
UDLEditions by CAST	A collection of digital texts with embedded supports including "Stop and Think" prompts, TTS, dictionary and reference supports, and annotation tools.
UDL Bookbuilder by CAST	This tool allows you to create, share, publish, and read digital books that engage and support diverse learners according to their individual needs, interests, and skills. Click on the "Public Library Books" link to see books that have already been developed and shared by others.
StorylineOnline	A collection of titles read by members of the Screen Actors Guild. Each title includes an activity guide.
Thinking Reader (commercial)	Commercial software program for grades 5-8 with numerous embedded supports and several fiction titles.
WiggleWorks (commercial)	A commercial reading and writing support program for grades K-3.

UDL (Universal Design Learning) tools

The Internet offers a multitude of software programs to support all types of learners. Look over the collection of tools gathered here and choose at least three to explore in depth.

As you explore, consider the following:

- How does this tool make your curriculum more accessible to a variety of learners?
- Is this tool intuitive and easy to use?
- Would your school or district be willing to purchase a tool?

TTS and Vision Resources

Type	Resource	Description
TTS	iSpeech	Free and pay TTS services that can convert text from a number of sources including Word, PDFs, HTML, blogs, and RSS into audio files.

TTS	SpokenText (free trial/subscription)	A TTS converter supporting multiple languages and formats.
TTS	Text To Speech	TTS service with several advanced translation features.
TTS	NaturalReader (PC only)	A free downloadable program from Microsoft offering advanced TTS support.
Vision Support	Virtual Magnifying Glass	A free and simple screen magnification tool.
Vision Support	Magnifying Glass Pro (free trial; PC only)	A screen magnification tool with several advanced features for additional visual support.
Software Suite	Kurzweil Education Systems (commercial)	Several programs offering reading, writing, math, and assessment supports.
Software Suite	SOLO Literacy Suite (commercial)	A software suite with reading, writing, and organizational supports.

Content and Presentation Tools

Type	Resource	Description
Presentation Tools	GlogsterEDU Prezi Jing Animoto (for Education) ToonDoo Make Beliefs Comix SAM Animation	These online tools allow students to display knowledge in alternative ways to text.
Writing Support	Thinkport Annotator Write:OutLoud (commercial)	These support tools help students refine their ideas and writing with features that allow for annotation, playback, and more.

Vocabulary Support	Merriam-Webster Tools Dictionary.com Toolbar (PC only)	These tools provide “just-in-time” vocabulary support by allowing users to look up words as they encounter them in an online setting.
Math and Science Support	National Library of Virtual Manipulatives Shodor Interactivate PhET Interactive Simulations ExploreLearning (free trial/commercial)	Applets and manipulatives provide a hands-on alternative to text-based math and science concepts, and allow students to interact more directly with important concepts.
Research Support	CAST Strategy Tutor Zotero	Research support tools include tools that organize citations and sources, as well as guide students through picking out the useful information from websites.
Graphic Organizers	Exploratree Bubbl.us Inspiration/Kidspiration (commercial)	Online graphic organizers offer learners a way to organize, reorganize, and present information visually.

Multimedia Resources

Type	Resource	Description
Captioning	Described and Captioned Media Program	This organization specializes in providing accessible media to hearing and visually impaired people.
Video	Discovery Education Streaming PBS Teachers History Channel Video Gallery	These sites include libraries of multimedia available for use in the classroom.

[Kahn Academy](#)

Audio

[LearnOutLoud](#)

[Smithsonian Podcasts](#)

These sites offer educational podcasts, which can be listened to online or downloaded to personal MP3 players.

Interactives

[Brain Pop](#)

[Sheppard Software](#)

These sites offer interactive educational games covering various content areas.